## Why Speed Limits Are What They Are

First of all, it is important to note that speed limits are created or established by the entity who has jurisdiction over that particular road. For example, the speed limit for US 31, which is a state highway, is set by the Indiana Department of Transportation (INDOT) and the speed limit for Union Street, a local Westfield road, is set by the Town of Westfield. However, all entities are required to follow the same guidelines set forth by Indiana Code.

Some of these guidelines include, but are not limited to, traffic studies, speed studies, road structure and design. This process is more sophisticated than one might generally think. Indiana Code (IC 9-21-5-6) establishes a maximum speed limit for a given road. The road use is generally categorized by roadway construction and population density. For example, an alley can have a maximum speed of 15 miles per hour, an urban roadway 30 miles per hour, and a rural roadway 55 miles per hour during daylight hours, and 50 miles per hour during nighttime hours. There are other classifications under Indiana Code.

Indiana Code 9-21-5-6 indicates that a local authority may decrease the speed limit of roadways, but requires that an engineering and traffic investigation (study) be performed. The best guide for engineering and traffic investigation is the Manual on Uniform Traffic and Control Devices (MUTCD). Section 2B.13 of the MUTCD states: "When a speed limit is to be posted, it should be within 10km/h or 5mph of the 85<sup>th</sup> percentile speed of the free-flowing traffic." This stems from the thought that most motorists are reasonable and are competent in their ability to determine the safe speed for a given roadway condition. This assertion has been reinforced in a number of studies from the Office of Safety and Traffic Operations branch of the Federal Highway Administration. Information indicates that there are little changes in the speed traffic and increases for vehicle traveling much faster or lower than average. For most Federal, State and Local agencies, the 85<sup>th</sup> percentile is considered the best tool available. However, in certain circumstances, there are other factors that can be considered in addition to the 85<sup>th</sup> percentile, such as:

- 1. Road characteristics, shoulder condition, grade, alignment, and sight distance;
- 2. The pace speed;
- 3. Roadside development environment;
- 4. Parking practices and pedestrian activity; and
- 5. Reported crash experience for at least a 12-month period